

elements except processing the accumulated data regarding the performance of the mass storage system in response to the host generated commands, the processing comprising validating and correcting, as required, the accumulated data. The Examiner contends, however, that Voigt teaches this step (in the Abstract, lines 1-7; Solution, lines 1-11; and Blocks 0023-0033), and that it would have been obvious to modify Hale to include this step. These claim rejections are respectfully traversed.

Voigt discloses a system for identifying methods of improving performance in data storage systems. In particular, Voigt discloses sampling a performance metric during operation of a storage system; determining if the performance metric is at some desired level of performance; and suggesting to the user ways of improving performance of the system in the event the performance metric is not at the desired level of performance. Voigt does not disclose or suggest processing accumulated data regarding mass storage system performance, by validating and correcting, as required, the accumulated data. Voigt, by contrast, only discloses suggesting corrections to the system in order to improve its performance. In other words, Voigt does not teach validating and correcting data relating to system performance, but instead teaches correcting the system itself for improving performance. Voigt also does not recognize any need for or otherwise suggest processing accumulated data on system performance by validating and correcting it, as required. Therefore, even assuming that the Examiner's combination of Voigt and Hale is proper under §103, the combination does not teach (or suggest) each and every limitation of the claims as required for a rejection under §103.

In the final office action, the Examiner contends that "Voigt not only discloses corrections to the system in order to improve its performance but also discloses validating and correcting data relating to system performance." The Examiner cites three portions of the reference to support her position.

The Examiner first refers to the abstract (lines 1-7) and, in particular, to the following text:

To provide a method for improving and specifying performance of storage system by which the performance of an operated storage system is evaluated with the purpose of monitoring or predicting such a state that gives an adverse influence on the performance and, when it is detected that the performance is not optimum, the user of the system is warned of it so that the user can take a measure to improve the performance.

This portion of the Voigt reference appears to disclose improving performance of a storage system by monitoring performance and, when non-optimal performance is detected, the user is warned to take some measure to improve performance. The cited text does not in any way disclose or suggest validating and correcting data relating to system performance.

The Examiner also refers to the "Solution" section of Voigt, in particular to the following text in lines 1-11:

An evaluating period is selected and whether or not an arbitrary measuring standard meets the specification is discriminated (62). When one or more performance measuring standards do not meet the specification, one or more proposals which are useful for improving the performance of the data storage system are given (68).

This cited text appears to disclose providing "proposals" for improving performance of the data storage system when a performance measuring standard does not meet a specification. Again, it is unclear how the cited text in any way discloses or suggests validating and correcting data relating to system performance.

The Examiner also stated that Voigt discloses validating and correcting data relating to system performance in Blocks 0023-0033. This cited text describes identifying and measuring "performance metrics". Again, it does not in any way disclose or suggest validating and correcting data relating to system performance.

For the purpose of reference, submitted herewith is a copy of U.S. Patent No. 5,623,598, which is related to the cited Voigt reference and is entirely in English.

Claim 1 is therefore allowable over the combination of the Hale and Voigt references. Claims 2 and 3 are dependent on Claim 1 and are similarly allowable.

II. Claims 4 and 5

The Examiner also maintained her rejection of dependent Claims 4 and 5 under § 103(a) as being unpatentable over Hale in view of Voigt and further in view of Perera. Perera discloses error detection and correction in an optical storage system. Perera does not solve the deficiencies of Voigt with respect to the rejection of Claim 1, on which Claims 4 and 5 are dependent. Furthermore, Perera is not properly combinable with Hale under § 103 because the two references are directed to solving different problems; Hale is directed to measuring performance in a mass storage system having a plurality of disk drives, and Perera is directed to error detection and correction in an optical storage system. One skilled in the art would not consider combining the teachings of these references. Therefore, the rejections of Claims 4 and 5 based on these references should be withdrawn.

Claims 1-5 are pending in the present application. As the application is now believed to be in condition for allowance, issuance of a Notice of Allowance is respectfully requested.

Respectfully submitted,



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